THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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BALTIMORE: TUESDAY, DEC. 4, 1838.

☞ The Silk Growers' Convention will meet in this city on Tuesday next, 11th inst. in the Saloon of the Law Buildings.

The Silk Growers' Convention.—The Zanesville [Ohio] Gazette, in speaking of the convention to be held in this city on the 11th inst. says—

"It is believed that a body of practical men thus meeting in convention, each prepared to contribute his proportion of experimental knowledge, will be able to lay before their countrymen a fund of most valuable information in the shape of facts and suggestions which will give confidence to the inexperienced and wavering, as well as impart knowledge greatly conducive to success. Persons having specimens of cocoons, raw silk, sewing silks, or articles manufactured from American silk are invited to send or take them to the convention. "What man has done, man may do," has been well remarked, and nothing goes so far to convince the incredulous as a sight of the articles produced. We have now in our office two specimens of sewing silk made in this county equal for strength and beauty to the best Italian. We do not pretend to say how far men may profitably engage in the culture of silk, but we do know, *for we have seen it done*, that silk of excellent quality can be made in this county, and by persons who have had little experience, or other information except what has been derived from *Roberts' Silk Manual*, or some kindred work."

We thank the Editor for his kind offer contained in the annexed notice of our Silk Manual:

"Mr. Roberts, editor of the Farmer and Gardener, Baltimore, Md. announces in the last number of that valuable periodical that he has been induced by the continued demand for his Silk Manual, to revise it preparatory to the issue of a third edition, which will be ready for sale in a few weeks. The increased attention which has been bestowed upon silk culture since Mr. Roberts issued his first edition, has enabled him to greatly improve that useful little work; a work which has aided as much as any other in producing an increased attention to this business. We wish him success, and shall with pleasure, forward any orders we may receive for the Manual."

We learn from the *Freedom's Centinel*, published in Centreville, on the Eastern Shore of this state, that on Friday, the 18th ultimo, the Queen's County Silk Company had their sale in the village. The day was very unfavorable, being rainy, which doubtless prevented many from attending. The Company, however, disposed of $2200 worth, at very fair prices, and closed the sale, reserving the remainder for disposition next spring. The prices paid at the Company's sale, averaged about $50 per thousand cuttings.

We are pleased to see it stated in the same paper, that another Silk Company has been formed in Centreville, Queen Anne county, Md. with a capital of $10,000. The stock was taken in a few minutes after the subscription was opened.

We also learn from the same paper that both of the Queen Ann County's Silk Companies will be represented in the *Silk Growers' Convention*, which is to meet in this city on the 11th of the ensuing month.

The Morus Multicaulis—We saw, this morning (says the Boston Transcript) a skein of white silk, equal in quality to the best Italian, which was manufactured by a son of Mr. George Bunt, of Manchester, a lad of only 15 years of age, from the silk wound by silk worms that were fed on the leaves of a morus multicaulis tree, which the boy planted *last spring*. The skein was one of a dozen manufactured by the boy and *the worms* from the leaves of the same tree. What renders the circumstance more remarkable, is the fact, that the lad made his own reel and spinning apparatus.

Miss CHARLOTTE MITCHELL, eldest daughter of Major Thomas Mitchell, of Thomas county, Georgia, when married some time since, was dressed entirely in silk of her own manufacture, viz. cap, stockings, gloves, and frock, which was pronounced by all that saw her to equal the best Pongee.

The Morus Multicaulis trees raised here have one-third more joints and buds than Southern trees; are worth 50 per cent more for propagation; and the wood becomes as mature and perfect on the high exposed position our Nurseries occupy, as at any place in the Union.

The above paragraph we cut from an advertisement of Messrs. Wm. Prince & Sons, of Flushing, New York, with a view of pointing out what we consider the invidiousness of its character, and the want of truth in its averment. In saying this, we would not wish to be understood as seeking a controversy, but merely as defending the mulberry growers of the south from what we honestly believe to be an act of injustice and wrong. That the Messrs. Prince can grow *good trees*, we are willing to admit—nay, that they do grow *very good trees;* but it is assuming too much, when they say, that trees raised at their Nursery at Flushing "have one-third more joints and buds than Southern trees, and of course are worth 50 per cent. more for propagation." The logician by attempting to prove too much, often defeats the object in view, and weakens rather than strengthens his argument; and so, we think, the Messrs. Prince have done. Their trees have "*one-third* more joints and buds," and forsooth, are, therefore, worth 50 per cent. more than Southern trees": now according to our arithmetic, if we admit all that these gentlemen claim for their trees, 33⅓ per cent. is the sum total of what, by their own showing, they can demand on the score of superiority; but as this superiority rests merely upon opinion unsupported by facts, it must pass for just what it is worth. We have a tree in our eye now, which we raised this season from a *one-bud* cutting, that has 224 *hard-wood* buds on it, and notwithstanding the preference assumed for the trees of Flushing, we think it would puzzle the Messrs. Prince to beat it. We admit that trees raised in the South on the *rich alluvial bottoms* of the Mississippi, would have elongated limbs, and consequently, that there would be a greater distance between the buds on such trees than on those raised in the East, but we firmly believe that in the superiority of their *size*, the former would make up for the closer position of the buds on the latter trees. Every one in the least acquainted with the laws of nature, know, that plants and trees grow much faster in fertile lands than they do on poor soils, and that the necessary consequence of this *rapid growth* is the elongation of their limbs. Hence it is to the *character of the soil*, more than the *location*, that we are to ascribe this effect. This being the case, although we of the South may not be as apt horticulturists as our Eastern neighbors, still we may claim for ourselves the credit of being endowed with suf-

ficient judgment to be able to select suitable grounds whereon to grow our trees, and as too many of the people of the old Southern states, have land, whose virgin excellence have been long since yielded up, it must be conceded that these worn-out fields will suit most excellently well for the purpose of producing *short-jointed* Morus Multicaulis trees.

It is quite fair and proper for these gentlemen to *praise* their own trees; but certainly it is *not very liberal* for them to do it at the expense of the Southern growers, many of whom, doubtless, bought their original stocks from them. But if Southern trees were really so worthless, would the Messrs. Prince be anxious to speculate in them? Certainly not, as they have doubtless too much honor to make money from a worthless commodity.

There is one virtue which belongs to the Southern trees, that does not appear to be the common property of all the trees we have seen—the Southern trees, in consequence of our *long-growing season, ripen their wood*, an object of first importance to those who desire the *buds* for the purpose of propagation; for no matter how *short a joint* may be, if the wood be not matured, no germination of the bud will take place, as a full and perfect development of the parts is essential to produce that effect.

CALIFORNIA CORN.

We find in the *Poughkeepsie Telegraph*, the following account of a new variety of corn introduced by Gen. James Tallmadge, into the state of New York, and which bears the name of that part of Mexico whence it was brought to this country. To speak of its being raised in California in Mexico, is, however, a very indefinite description of its local habitation, for *California* is the designation of an immense coast of country, stretching from the Cape of St. Lucas N. lat. 22° 52, to N. lat. 42, on the western coast of this continent through a range of nearly twenty degrees of latitude. In the indefinite character of the whereabouts of this stranger-corn, we nevertheless derive consolation; for, as we take it for granted that it is the variety generally raised in that vast district of country, we come to the conclusion, that there are but few of our states where it might not be acclimated—and we arrive at this conclusion, not because of its ripening the past season in this country, as vegetation was thrown forward fully three weeks by the long continued drought, which prevailed in June till the middle of August; but because any production which can adapt itself to those vicissitudes of climate and temperature to be found in 20 degrees of latitude, will be likely to prove as tractable an occupant to the soil, as though it were a native to the manor born. Again, it appears that the first experiments with this corn, were tried, and succeeded, in the season of 1836, which fact alone, establishes in our mind the possibility of its adaptation to our varied climates, as that season was as remarkable for its backwardness, as the former was for its forwardness. At all events, we should thank our friend *Killey*, of the Poughkeepsie Telegraph, to send us a few of the *kernels*, in order that we may test its congeniality to the soil and sun of Maryland—and we would be further obliged to him, if he would be so good as to give the length of, and number of rows on, the ear.

CALIFORNIA CORN.

A year ago this season, there was a good share of boasting in all the public journals on the subject of extraordinary products—such as tall grass, large clover, mammoth squashes, &c. At the time, and to eclipse every body, the gentleman living on the farm of Gen. James Tallmadge, about six miles south of this village, brought us two stalks of corn raised by him, the tallest of which measured fifteen feet two inches, and had five ears upon it. The other was nearly as high, and had four ears. The seed of this corn had been exhibited the year before at the fair of the American Institute, New-York. It was brought from California, in Mexico, and Gen. Tallmage, who is President of the Institute, gave some to his farmer, and the stalks we speak of were the product of that seed. We hung them up in our office, and they hang there still. They have attracted the attention of most persons who have been in the office within the year, and the kernels of the ears have been pretty well distributed through the county. Our present object is to enquire what the product of those kernels has been?

For ourselves, we planted some in our garden, but they have not done any thing of which we can boast, though the yield is good, and the stalks one or two feet higher than our common corn.—But two stalks from the seed raised by Mr. Friend Butts, of this village, surpass any thing we have ever seen. The tallest one is *seventeen feet high, and has* NINE *ears upon it*, five of which are good full ears—the others imperfect.—The other stalk has four ears. There was a third stalk which promised to be taller than the others, but it was blown down by the wind. He states that no extra manure was used, and the ground was not rich. If this corn will yield thus in general, and ripen in our climate as it has ripened this year, it is well worth the attention of our agriculturists. We should be glad to hear from others who took some of the kernels, how they have produced.

NEW ORLEANS, Nov. 17.

The Planter's Banner of the 8th states that the planters are actively engaged in sugar making, and the yield of this year is likely to be better in quantity and quality than that of any former season—It appears also that the sugar crop in the West Indies this year has been most extraordinarily good; in the Island of St. Croix alone, 20,000 hhds. of Sugar were made, and 17,000 casks of rum and molasses. The most flattering prospect for the crop is said to exist; and it is even thought that it will be more abundant than the last.

The present Cotton Crop—By the politeness of a gentleman arrived yesterday from Natchez, we have been put in possession of the Natchez Courier of the 15th inst. which contains the following unfavorable view of the present crop in that section. As our informant is well conversant with these matters, we fear there is too much truth in the subjoined:—*U. S. Gaz.*

Cotton—Our latest accounts represent the present crop still more unfavorably than was before anticipated. All throughout the cotton growing States, the prospects of the planter have been dampened, and every change in the weather hitherto has rendered a very great deficiency in the amount of our staple product still more certain—The past week has been unfavorable for picking; the present weather is unfavorable and promises to continue for some time; in some cases the same number of hands on the same plantation, picked, last week, barely the half of what they did the same week of last year. We are safe in publishing that the present cotton crop has not yet been represented so far deficient, as the most experienced planters now think it will turn out.

From the Genesee Farmer.

THE PHILOSOPHY OF VEGETATION.

Perhaps there are few subjects of so much interest to the farmer as a proper understanding of the causes and agents of vegetable nutrition. The economical application of manures, the propriety of their use, the value of a system of rotation in crops—in short, the whole philosophy and practice of farming—may be said to be depending on this point. Is there but one substance in nature that constitutes the proper food of plants? or are they endowed with omnivorous powers, and capable of finding food in all things presented to them? If there is but one kind of food, what is that one?—and if there are many, what is their state when appropriated by the plants? These are a few of the subjects that enter into a consideration of the food of plants; and the opinions of writers on vegetable philosophy have been as various and conflicting as the substances which chemical analysis has detected in plants have been numerous.

Some have maintained that the actual nourishment was derived from the air; some that water alone constituted the food of plants; others have asserted that the growth was owing to a single substance, and that earths which are present in plants, as well as most of the salts, are to be considered as merely accidental, not being necessary to the formation or growth of the vegetable: the only substance which all are agreed in considering absolutely indispensable, since it is a large and apparently essential part of every plant, is carbon. If the plant derives its support from the air, then the carbonic gas which exists in it must be the source of supply: if taken into circulation by the roots, then the carbon must exist in some soluble form, since the greatest chemical skill has never

been able to induce a plant to take up the minutest portion of insoluble carbon, or detect its presence as an operation of nature.

Amidst these conflicting sentiments, adverse and contradictory as they may at first seem, we think that the opinions of men of science are verging to an agreement on one or two of the most essential points; and what we consider as of quite as much consequence, these opinions very nearly coincide with the actual experience of the farmer, and give a strong support to the modern theories and practice of agriculture.

We believe that Klaproth was the first to discover and announce to the world the existence of a peculiar substance, which he considered of importance to vegetable organization from its analysis, and which, from his first finding it in the bark of the elm, he denominated *ulmin*. Braconnet continued the investigation commenced by Klaproth, and found there were few substances of vegetable origin in which ulmin did not exist, tracing it in considerable quantities in sawdust, starch, sugar, seeds, and indeed in nearly all plants it was present. Berzelius, the great Swedish chemist, embraced it in his researches, and extending them to the soil, found that it existed in the earth in abundance, as well as in the bark and ligneous substance of trees. From its presence in the earth, and the probability that it was from thence that plants derived it, Berzelius distinguished it by the name of *geine*, a word derived from the Greek word signifying the earth. Sprengel and Bouilly have discovered that it is a leading and efficient principle in vegetable and animal manures, and hence they have denominated it *humire*, a name by which it has been most generally known, though scientific men are appearing to incline to return to the nomenclature of Berzelius. The justly celebrated chemist and observer, Raspail, in his late work on Organic Chemistry, translated by Dr. Henderson, denies the existence of *genie* or *humire* as a proximate principle in soils, and says, "it will be easy to see that all these phenomena, (described by Berzelius, Sprengel and others,) apparently so varied, which have given room for the discovery of so many substances analagous to ulmin in their nature, are essentially nothing but a development of carbon." The name, however, we consider of mere secondary importance, and whether it is called *ulmim*, or *humire*, or *geine*, or *carbon*, it cannot effect the results which seem to flow from the substance and render it one of the most important agents in vegetable nutrition, if not the only one yet known. *Geine*, says Prof. Hitchcock, in his late admirable Report on the Economical Geology of Massachusetts, "when wet, is a gelatinous mass, which on drying, becomes of a deep brown or almost black color, without taste or smell, and almost insoluble in water; and, therefore, in this state, incapable of being absorbed by the roots of plants. Yet after the action of alkalis upon it, it assumes the character of an acid, and unites with ammonia, potassa, lime, alumina, &c, and forms a class of bodies called *geates*, most of which are soluble in water, and therefore capable of being taken up by the plants; and it is the state of *geates* that this substance, for the most part, exists in soils."

Silica, alumina, lime, magnesia, oxide of iron, potash, soda, and sulphuric and phosphoric acids, may be considered the inorganic principles of vegetables, and analysis detects their presence in the most of them; hence they will be found the constituents of all soils, for the most part existing as salts—for instance, carbonate of lime, sulphate of lime, muriate of lime, phosphate of lime, &c. Neither the earths nor the salts can be considered the proper food of plants, as both these may be present, and yet a weak or imperfect vegetation, or none at all, be the result. But if the combination of these salts with humus or geine has taken place, then, in connexion with the earths, vegetation will be vigorous, and the proper functions of plants fully developed. In the language of Dr. Dana, it would seem then "that the earths are the plates, the salts the seasoning, the geine the food of plants."

The 'Soluble Vegetable Extract,' of Davy and Chaptal, produced from carbonaceous mould, is the soluble *geine* of Berzelius, and the insoluble matter of the mold spoken of by Chaptal would seem to be the insoluble geine or humus of Berzelius and Sprengel. Geine is, therefore, the decomposed organic matter in the soil. When the result of recent decomposition, it is abundantly soluble in water; the action of the atmosphere converts this soluble matter into solid humus or geine, 'still partially soluble in water, and wholly soluble in alkali.' Soluble geine, and in this state only does it become the food of plants, acts neither as acid nor alkali. It is coverted into a substance having acid properties by the action of alkali, and in this state combines with earths, alkalies and oxides, forming neutral salts, soluble in water, such as magnesia, lime, &c., and thus matter insoluble of itself is prepared for the food and nutrition of plants. It seems to be satisfactorily established by late chemical researches, that this subtsance forms the nourishing basis of all soils, and that they are fertile or infertile exactly in proportion to the soluble geine they contain, or the application of materials capable of converting the insoluble into that which is soluble.

If there are any facts certain in agriculture, it is that a soil composed chiefly of one of the earths, either sand, lime, or clay; or one that contains an excess of salts, as pure manures; are always barren. Plants may indeed exist to a limited extent, but they will be weak and without fruit. To these earths add geine, and a perfect healthy vegetation will be the result. The great essentials of vegetation then are the earths, salts, and geine, and their degree of fertility will mainly depend on the proportion with which the last is mixed with the first.

Every discovery in experimental philosophy—every advance in vegetable chemistry, seems to render more clear the great truth, that nature's works, though apparently complex, are carried on in the simplest manner, and with the fewest possible agents. The slight shades of difference found to exist in the constituents of most dissimilar substances, such as starch, lignin, sugar, and some of the acids, prove that slight causes produce powerful modifications of matter, and render it probable that the original kinds of matter are less numerous than have been usually supposed. All investigations point to an agency that pervades all the forms of matter, and by an arrangement of atoms consequent on vitality produces all the varied forms of vegetable and animal nature. This agent, under the name of caloric galvanism, or electro magnetism, is constantly at work modifying, changing, combining, decomposing, and arranging. To it we owe aggregation and cohesion—to its subtle and diffusive energy, all growth and circulation—and may it not be considered as certain that the earths and salts are a magnificent voltaic battery, ever ready for action when moistened with water, and thus reviving the dormant vitality of the seeds submitted to its influence. But though this vitality may be revived, and the slumbering energy of this germ of the future vegetable be restored to activity, it is clear that the circulation will produce little or no effects in inducing growth, unless matter suitable for absorption and after-deposition, is provided for the newly awakened energies and action. This is furnished by geine, and is presanted in a state the most suitable for the circulating juices of the plant. Taken up by the roots, or absorbed from the air, it is converted into lignin or woody substance by deposition and æration, and thus becomes a new plant, prepared to run its course of growth, maturity and decay.

Taking this simple, and we think philosophical view of the subject, the reasons of many farming processes, hitherto but little understood, are made more plain; and various improvements suggested and made practicable. If a soil on analysis contains an undue proportion of any one of the earths, the evil can be remedied by combining them in the proper manner, by adding what is deficient until the balance is restored. But the fact, that the earths themselves, uncombined with salts or geine, are never fertile, and that all the combinations of which they are capable, can never be made to support vegetation, should not be lost sight of. Some soils, from the proportion of the earths found in them, are more friable and easier to work than others, and some combinations are proved to be more suitable for the union with salts necessary to the excitement of voltaic or galvanic agency and the consequent vitality and circulation of plants; but alone, no possible modification or combination can make what is called a fertile soil. Were we to name for comparison the agents and the several parts they perform in the process of vegetation, we would call the *earths* the plates of the galvanic battery, inert while dry, or not subjected to exciting causes; the salts by their solubility furnishing the acids, such as carbonic, sulphuric, phosphoric, necessary to rouse the battery action; and when this is done, humus or geine offers the only matter that can be taken into circulation and constitute (properly speaking) the food of plants.

According to the modern investigations of science, every particle of matter is pervaded by this universal agent, and requires only the aid of moisture to its greater or less development, the intervention of the fluid serving as a conducting power between the several particles. Pure water is the weakest exciting power yet known, but at the same time the most durable. This is beautifully exemplified in the experiments of Mr. Crosse, who uses only water for the exciting power of his batteries when he requires their uninterrupted action for weeks or months, the slow continued excitement being more favorable to the development of animal life, or metallic or mineral crystalization, than one more powerful, but of shorter

duration. This action of water shows why water alone, applied to the earths and through them to vegetables, has so feeble and tedious an operation on their development. On the contrary, if the acids are supplied, and this is done in a multitude of ways, the action becomes at once vigorous, and connected with a proper supply of food, vegetation will be rapid and abundant.

This theory of vegetable nutrition explains, in our opinion, far more satisfactorily than any other, the mode in which manures, vegetable, animal and mineral, produce their effects on vegetation, and stimulate its growth. According to Chaptal, the different substances afforded by animals, and useful as manure, including all their secretion, are, "gelatine, fibrine, mucus, fat, albumen, urea, uric and phosphoric acids, and some of the muriates or salts." Here, it will be seen at a glance, are a multitude of exciting and nutritive causes mingled, and when combined, as animal manures usually are, with vegetables decomposed, the available geine is considerably increased. The liquid manures found so powerful in Flanders, and the use of which is such a marked feature of the excellent Flemish husbandry, are, it is well known, mostly composed of the urine of animals. The analysis of urine by Mr. Brandt discloses the cause of this efficiency.

Water,	65
Phosphate of lime,	5
Muriate of Potash and ammonia,	15
Sulphate of Potash,	6
Carbonate of Potash and ammonia,	4
Urea,	5
	100

A more active combination could scarcely have been devised than this analysis shows such manures to be; and though Fourcroy and Berzelius slightly vary the constituents, their analysis does not materially alter or impair its efficiency. Of the above animal ingredients, we will select but one to illustrate our theory, as it is one respecting the efficiency of which as a manure there can be no doubt, and which is daily coming into more general use—we allude to phosphate of lime or bone dust.

(To be Continued.)

From the Farmers' Register.

SCRAPS OF INFORMATION WITH REGARD TO THE CULTURE OF THE CHINESE MULBERRY.

In the present unparalelled and general excitement in regard to the speculations in purchasing, and intended cultures of the morus multicaulis, no apology need be offered to our readers for giving to that, and to kindred subjects, so much space in his publication. Indeed, whether viewed as a valuable future improvement in the agriculture and industry of this country, or as a subject of national mania, the one is of intense interest to almost all who read agricultural publications, and to even most persons who read nothing. Almost every one of our subscribers, stimulated by some one or other motive, will desire to cultivate at least a few plants; and all are but slightly informed on the subject. Therefore, in adding to the valuable general directions for the culture given by G. B. Smith, Esq., in the last No. we shall add here some interesting extracts from several private letters from T. S. Pleasants, an extensive cultivator of some experience, and whose general intelligence, and correctness of observation, deserve the fullest confidence. These were designed only for our own perusal and use; but considering the suggesstions as interesting, and likely to be useful to many others, we have asked and obtained permission to share the benefit with our readers.

To these extracts will be added other scraps of information received from various sources, and principally from the Rev. Sidney Weller, of Halifax county, N. C.

It is gratifying that the favours of fortune, in this sudden surprising mulberry madness, have fallen in some cases upon most worthy receivers; and there are none in whose successful and profitable cultivation we are more gratified than in the cases of the individuals named above. In general these unexpected visitations of good fortune have fallen upon a class of cultivators, who usually work more for the public benefit than their own, and whose improvements, or schemes, subject them always to ridicule, and often to loss. These are the book farmers and experiment-makers—*and especially the regular and devoted readers of the Farmers' Register, or other agricultural periodicals.* To this last fact we desire particularly to call attention; and would be much benefitted if it could be presented fully to the view of all who have made nothing from this golden harvest, simply because they had read nothing concerning the cultivation which has produced it.

We shall take the liberty of speaking more fully of Mr. Weller's case, because it is one of peculiar interest. He settled himself on a piece of miserable poor land, and with very little prospect, as his neighbours thought, to make a bear subsistence from its products. He has devoted himself principally to vine and multicaulis culture. Some notices of his useful services to agriculture, in the former department, have been heretofore given in this publication. Of the latter, the principal circumstances are as follows. Five or six years ago, being then, and long before, a regular reader of the American Farmer, he was induced by its recommendations (all of which we owe to its former Editor, Gideon B. Smith.) to begin the cultivation of the multicaulis. He bought of J. J. Hitchcock, of Baltimore, a plant of about a foot in height, for which he paid a dollar, and 25 cents more for getting it to his residence. From this small beginning, all his stock, and many other, now large stocks, bought from him, have grown. Mr. Weller's sale of plants, before this season of speculation and high prices had commenced, amounted to about $2000, and, this fall to $8000 more, though made at 6 cents the foot, and before the rise to half the present current prices; besides reserving enough stock to double or treble his crop next year.

Let it not be supposed from these or any other statements of enormous profits from raising multicaulis plants, that we design to have it inferred as our opinion, that we expect them to continue. The greater part of the present prices of multicaulis is undoubtedly a bubble, blown up by speculation; and that part must burst sooner or later, (when, we cannot predict;) but the *intrinsic* value of the plant will remain; and if silk culture should be really undertaken by only one in every hundred, and the demand thereby created should maintain, for two seasons, the plants and buds to one-eighth (or perhaps one-sixteenth) part of their present exorbitant prices, the cultivation will still be highly profitable to all who plant even at the present high prices. If there should be *no demand* of purchasers, and *no design in the cultivator to raise silk worms*, then of course he will lose his whole outlay. Of these, or of better chances, every adventurer must judge for himself.

We proceed to give extracts from our friend Pleasants' leters. *He* will not confine his efforts to merely raising mulberry plants for sale, but will feed silk worms the next season, on a considerable scale. For this purpose, he has acquired possession of the Bellona Arsenal, in Chesterfield, which will be converted from its late warlike name and purpose, to a laboratory for the peaceful and useful labour of silk culture, under the direction of its present worthy occupant.

* * * * *

On the subject of *one-bud cuttings* of multicaulis I can give thee my experience this year, which perhaps may be of some value. It is probably known to thee, that with scarcely any exceptions, there was a great failure in getting cuttings to start last spring. John Carter is the only cultivator I know who has succeeded well. Next to him I place myself—but at a considerable distance in the rear. To the north, not more than one in 15 or 20 grew. The failure was owing to a peculiar season, for I never saw cuttings start better than mine did. An excessive drought, at the time the plants began to root, dried them up. In preparing my cuttings, out of some of the strongest and best wood, I cut 10,000 or 15,000 with one bud. The one-bud cuttings I planted to themselves in the same sort of ground with the others; and they were all subsequently tried alike. Taking the piece at large, they stand as well as the best spot of two-bud cuttings, and much better than the greater part of them. They came up with great regularity, and have grown off very evenly.

"If the season is propitious, there is no reason why a cutting with one bud should not grow as well as one with two buds. A large one may be stuck deeper in the ground, and in the drought, it may be longer under the influence of moisture—But with *early planting*, I have no hesitation in relying upon any good one bud cutting; and early planting, by the way, is more or less important to the success of every mode. I have never taken up my multicaulis plants so early in the spring, but what I found the buds started, and the little rootlets in the act of being thrown out. The growth must therefore be checked by exposure to the air, and transplanting. From my observation, the conditions which I would recommend, (and which I rely on so fully that I intend to practice them,) in order to insure success to one-buds, are as follows: Preserve the plants during winter in a cool place, not exposed to the sun. Let the ground be prepared, so that the planting may be commenced as early as the season will permit; if in February the better—at any rate, early in March. The soil should not be so light or sandy as to become thirsty very soon. Let the cuttings be prepared by separating midway between the joints, and stick them deep enough for the bud to be covered from an inch to an inch and a half, according to the texture of the soil. The bottom of the slip will then be 2 1-2 inches beneath the surface—a depth

to which the ground seldom becomes entirely dry in the early part of the spring—and if there be any choice of ground in the lot, select for single buds that part which lies the lowest, as being likely to retain moisture the longest. With these precautions, and above all, *early* planting, no failure can, in my opinion, ensue; but I would advise thee to consult other cultivators on the subject. By a strong cutting, I mean one taken from the larger part of the main stem of a vigorous plant, and those near the base of thrifty lateral branches. Some days ago, I removed the earth from a number of my single-bud plants, for the purpose of examining them carefully. I found some smaller than I intended to plant; but the trees were as large as those from the largest cuttings. * *

"My plants will this year yield *per cutting* about 40 buds, on the average—perhaps more, and the most of them grow on a thin, shallow soil, that never was manured." * * * *

"It is the opinion of many men of judgment, with whom I have conversed and corresponded, that the present prices will be nearly or quite sustained another year. The stock of mulberries is not so large as one might suppose. There are very few in New England. A friend in Baltimore informs me that G. B. Smith estimates the number in the United States as two and a half millions. R. Sinclair (perhaps in conjunction with Smith,) states the same number; and a friend of mine, who has taken great pains to inform himself, has arrived at precisely the same conclusion. I cannot help thinking there are more; but my information on the subject is not extensive. In regard to the demand, I may say that in addition to that indicated by the present high prices, Judge Comstock, editor of the Silk Culturist, told me he did not think there were more in the United States than would supply the state of Connecticut, at fair prices, if they were all sent there. And a gentleman of Burlington informed me that there were not more than enough in New Jersey to supply the present demand in the county of Burlington in the same manner.

"I intended to have said a word about sprouting cuttings in a hot bed, as recommended by G. B. Smith. I have only tried it once, and then on a small scale; but I did not succeed very well. The objection, is, that the plants become chilled and stunted by removal from such comfortable quarters to be exposed to the inclemencies of the month of May. But in any event, great skill and attention are requisite in the management of a hot bed.

"It may be very familiar to thee, but it will do no harm to add, that the most convenient instrument in preparing the cuttings, is a pair of pruning acissors—such as are used by vine dressers."

* * * * * * * *

[My experience teaches me that this objection rests against plants grown in hotbeds with glasses. We, however, consider that glasses are wholly unnecessary, if not injurious. If the cuttings be started in hot-beds, covered in bad weather, and during nights with straw or grass mattings, they can be raised just as hardy as if planted in the field, and will have the advantage of being from three to five weeks earlier in their growth. I have transplanted cuttings thus raised, taking advantage of a good season, just after a rain, without their leaves ever drooping, or the plants being put back a single day in their growth.

From close observation I unhesitatingly say that I consider the hot-bed as above described the best mode of starting the cuttings.

EDWARD P. ROBERTS,
Ed. Farmer & Gardener.]

"I had intended to supply an omission made in regard to the preparation of cuttings; and the remark I would make, applies especially to cuttings of single buds. It is the main stem that I recommended to be cut into single buds, and it is the strongest part of the stem that throws out the lateral branches. As every lateral starts out, there is no bud (at least none that will readily grow,) remaining at the joint; and it is therefore necessary, in preparing the cuttings, that the lowest bud on the lateral should be left to the main stem. I lost many plants last spring by not attending to this.—And the sellers of mulberries, who supply *trimmed* plants, should always prune in this way, otherwise, the best portion of the wood on the whole plant will be of little value.

"I have almost determined to plant a portion of our cuttings *this fall;* say about the last of Nov. or 1st of December. The slightest covering of earth, I have always found sufficient to protect them during winter. If thou hast noticed the plants in spring, when they are uncovered for the purpose of planting, especially if it be not very early, thou hast no doubt observed that every good bud has sprung. By exposure to the dry air, many of them perish before they are planted. Had they remained under a proper depth of soil, every bud, starting as they do at the same time, would have shown itself above the ground. Why cannot they be protected in the field equally as well, without being subjected to spring handling and removal? It would be an easy matter to cover the stems in the furrows two or three, or even four inches deep, and remove the covering in the spring, which would be a good working. I have been thinking all the summer I would plant a portion of my crop in this way; but I should be afraid to recommend it strongly to others, lest they might be a failure. If, however, it should succeed as well as I am convinced it would, almost every bud would produce a tree, and by vegetating earlier, it would produce a much finer tree than by the common mode. I perceive that Cheney, who is a very experienced cultivator, recommends that *layers* should be planted in the fall.—At all events, I know from experience that the earliest spring planting is much to be preferred to deferring it until the ground becomes somewhat warm. Like grains of early planted corn, the cuttings are throwing out roots, the germ may not appear above ground, much sooner than the late planting. Unless the ground was clean, there might be danger from the field mice. Please to give thy views on this subject.

"Wilt thou take it amiss, If I venture to assign one or two reasons why thou shouldst not offer thy plants of 1839 for 12 1-2 cents, as thou didst propose doing some time ago? I would not deter thee from doing so, for the purpose of keeping up the price. If they do not sell for more than 9d. I shall be perfectly satisfied. It is enough for them.—But can any one individual reduce the market price by offering his crop at reduced rates, or even by giving them away? Perhaps thou mayest grow a million. If there be a brisk demand for 20 million, which will probably be the extent of the supply next year, a million or more or less will have very little effect upon prices. By contracting now to receive much less than they will probably command, thy efforts to reduce the prices will be unavailing, and thou wilt be voluntarily depriving thyself of the profits to be derived from the culture. Speculators, also, might buy up thy whole crop, and retail it at greatly advanced rates. Indeed it is only the speculator, perhaps, that would now contract to receive plants to be delivered a year hence. So that I see no probability of thy effecting thy object by this course. It is however very possible that by another year, public feeling on the subject may be more rational, and that prices may correspond with the actual value of the plant for which it was designed by nature. We are now going through the paroxysm of the fever, in due time it will abate, health will be restored, and reason resume her empire. Let us wait patiently for it, and do all we can to promote the culture of silk, until the question is settled whether or not it can be introduced into this country as a profitable branch of agriculture."

* * * * * *

"I think I have obtained some valuable information respecting the action of bone manure in growing mulberries. When I was at the north, I inquired particularly about its general value, at Boston, Philadelphia and Baltimore. At Boston, there is a very large manufactory. At all three places, the price for crushed bones is 35 cts. per bushel. I purchased 200 or 300 bushels in Baltimore; but it was not until after I left there, that I heard of its good effects on mulberries. A grower in Burlington had applied some to a small lot of ground, and the effect was so beneficial, that I heard the trees spoken of as being the finest of the whole country. They had tried to keep the knowledge of it a secret there, for their own advantage; but I intend that it shall be known. I am promised the result of another experiment. I am fully convinced that with the use of $5 worth of bone manure to the acre, our highest and dryest and poorest lands can be made to produce trees 5 or 6, or 7 feet high.

"Please inform me what was Sydney Weller's mode of saving his immature cuttings. I heard thee detail it, but perhaps I have forgotten some part."

In answer to the foregoing inquiry, and for the benefit of all others of our readers, the information derived from Mr. Weller's statement of his practice will here be given.

All who have observed the Morus Multicaulis, know that the plants of one year's growth have a large portion of the latest formed stem and branches so green and tender as to be unfit to withstand severe frosts. This part of the plants, (with all the buds thereon, though frequently amounting to one-fifth, or more of the whole number on the plant,) has, until lately, been deemed worthless and taken no account of in sales, or in planting.—But in our own small prac-

tice, it was observed last spring, when the plants were taken out of the earth under which they had been kept through winter, that the unripe buds, to the very extremities of the twigs, had begun to start in growth, and of course that they possessed enough vital power to produce plants, if properly managed. The proportion of unripe wood this year is numerously great, owing to the early and continued drought of summer having been followed by abundant late rains. After the first year, there is a very little of the wood left unripe, as the branches generally ripen to the ends.

Mr. Weller had earlier learned the vital power and value of these unripe buds, and has practised with success the following manner of saving them separately. As soon as there has been frost enough for the leaves to fall off, and before any more severe cold weather follows, all the unripe ends of branches and stems are cut off, including about an inch, or one bud, of the adjoining ripe wood below. These are laid in a shallow pit or trench, or even on the cleanly scraped surface of the earth, so as to be more than four inches thick; and then are covered over with clean and friable soil, (sand would be better,) which is to fill up all vacances between the twigs, as well as to cover them. Then, any kind of earth may be heaped on, so as to cover the twigs 12 or 18 inches deep, if freezing is feared; though a few inches depth has always proved sufficient. As in all other cases of winter-pits or trenches to contain multicaulis plants, the access of too much water from rains should be prevented, by choosing an elevated spot, or surrounding it with a ditch. Mr. Pleasants' views and advice as to choosing a *cold* situation, to prevent the too early springing of the buds, are likely to give still greater value to this practice of saving and using unripe buds. Mr. Weller relies on his unripe buds, saved as above, to be nearly as certain as the ripest, to vegetate and produce, and this information may be worth several hundreds of dollars, this year, to every one who has as much as an acre in multicaulis plants. It is highly necessary to avoid having any vegetable matter in contact with the buried twigs as mouldiness and rotting will be produced, and perhaps may spread beyond the twigs first affected.

As to the capacity of the unripe buds to germinate and to produce good plants, if preserved properly through winter, (without being cut from the plants, we knew it likewise from the information of John E. Meade, Esq., of Prince George, who availed of the knowledge so well that he has now as many growing trees as he bought cuttings last spring—the unripe buds, which are not charged, having fully made up for all the failures of the ripe. By the way, cuttings bought by Mr. Meade last spring, cost him (at an unusually low price) $10, and the crop from them is worth $1000, at the present enormous prices and ready sales.

We saw Mr. Weller's nursery, (in Halifax county, N. C.,) on October 16th. Tender plants, (such as sweet potato vines,) had then been partly killed by frost, but his mulberries were barely touched, on some of the youngest top leaves, and many grow, or ripen, much more yet. He had worked the ground late in August; and that, (as we think, improperly late cultivation) as well as the late rains, had caused a very late growth, and an unusually large proportion of unripe wood and buds. He does not trouble himself to cut down and cover, or to use any other means to protect in winter, any of his plants, except the unripe extremities of branches. He considers all the ripe wood as perfectly safe. This is a most important advantage of the climate of North Carolina and Virginia. But though cutting down the entire plant is unnecessary to protect the ripe wood from cold, still as it will be done at any rate, for cuttings, while the great demand lasts, it will be better to protect the unripe buds.

Mr. Weller's nursery ground is quite sandy, and it had been very poor, and most of it now far from rich. Yet his one-year's plants are generally four and sometimes six feet high; showing the great advantage of using the lightest soil. At Gaston, on the rich as well as light soil of the Roanoke low-grounds, a small patch, belonging to W. W. Wilkins, esq., would average, certainly 150 good buds, (and he thinks 200) on the plants of this year's growth. It is certainly the finest growth we have seen. These plants, from buds planted last spring, in seven months thereafter would sell for $3 a piece—perhaps for $5, at the present prices. Some waste building lime had been given to this spot. We had been before inclined to believe that calcareous manures are peculiarly adapted to the mulberry, from having observed the usual locations, and degree of luxuriance, of the native growth. Mr. Weller has found very decided benefit from sprinkling the rubbish of old mortar, (from demolished brick-work,) in his rows of multicaulis cuttings. The great value, too, of bone-manure, (though bones are of phosphate of lime,) as stated by Mr. Pleasants, is a valuable fact, and helping to confirm the opinion of the demand of this plant for lime in some of its forms of combination.

Mr. Weller plants at any time in winter or spring, when he has the time. He has no objection to, or fear of, fall planting, but has no spare labor at that season. He cuts up, generally, into single-bud cuttings, and drops the bits into the furrow, with no care as to their position, and about seven or eight inches apart, (sows three feet) and covers carefully. We think a better mode would be to stick the lower end of the cutting into the soft mould, perpendicularly, and to cover the bud not more than an inch, if near the time to sprout. The lower extremities, where the roots form, in this case would be as low as possible, and so much the more likely to keep moist: and the bud be very near, as it ought to be, to the air. These objects will be still the better answered, by cutting the branches as close *above* each bud as is safe, and of course giving as much length as possible of each cutting *below* the bud.

Besides the rapid mode of propagation from single bud cuttings, when they are allowed to have the growth of an entire season, there is another process which may be added, and by which the product may be still more and greatly multiplied.—This is by *summer layers;* which mode is extensively practised by some of the largest dealers and nurserymen, and which is certainly an admirable means of making profit by imposing on distant and ignorant purchasers, still more than to obtain the legitimate gain of the actual increase of the stock of plants. As described to us, the following is the most approved and productive plan of raising from layers. Early in July, or as soon as the young shoots are 10 to 15 inches high, let each be bent down and laid on the earth, and confined there by a forked stick, and a little earth be laid on one of the buds near the extremity. The leaves of the buried buds should be cut off. From these, roots soon strike out, and each extremity runs up rapidly into what northern nurserymen call "a tree." Soon after the first operation, every alternate bud, of the stem laid down, should be covered with earth in like manner, and from each of the intermediate buds left uncovered, there will be thrown up other upright shoots, of which the connecting original stem may be cut apart, before the growing season is over, and thus form so many of what are termed "rooted and *untrimmed*" trees, and sold as such, formerly at 25 to 38, and now at 60 cents or more, a piece. In this manner in a good season, and during rapid growth, we are informed that sometimes six, or eight, and even ten "rooted trees," may be raised in a year from a single bud planted the same season. This is a very useful practice to increase a small stock rapidly; as these secondary, though very inferior plants, if well preserved through winter, will furnish a greatly increased stock of buds and roots for the next year's planting. But *to sell* these plants, of half a season's growth, to distant purchasers as "rooted trees," without explanation, is a gross fraud, which has been most extensively practised already, and by which hundreds of thousands of dollars have been, and will be, unrighteously gained.

From this description many purchasers of plants will not understand the manner in which their supplies were produced. For plants from layers must necessarily be of small height, the growth late, and a large proportion of the stem unripe—and always without branches, (though sold perhaps at nearly double price for being "*untrimmed*"—) and the roots, consisting of a small horizontal bit of the original stem converted to root, with merely a few thread-like rootlets extending therefrom. Purchasers should guard against receiving the products of layers as "rooted trees," whether sold as "untrimmed" or not.

Cuttings, also, may be separated from young plants in any wet season, during summer, and, if set out immediately, will have, and form separate rooted-plants. We are inclined to believe that the *topping* of young plants, for this object, in July, would be useful, by causing more extension of side-branches, and better maturing the buds on the extremities.

Among the great and unexpected products from this year's growth of mulberry plants, there will be an abundant harvest of law-suits. We know of several having been already commenced. There will be many novel points of agricultural law for the courts to decide, which will be curious, and not a little amusing to all except the litigant parties.—All persons who make contracts, should be very cautious as to the other party with whom they deal; and the manner of fixing the conditions.

We will close these scraps of information with some arithmetical calculations and estimates, which perhaps may be of service to readers who design either to buy or to sell, or who are in possession of multicaulis plants. We have had reason to be surprized to find, in sundry cases, how little had been done, even by dealers to a large

mount of money, in the way of estimating arithmetically, the present or prospective amounts, or market prices of their possessions or purchases. It is, therefore, that we have thought that these *mulberry statistics*, and estimates, trifling and humble as they are, may not be useless.

On page 592, vol. 2, of Farmers' Register, and in the appendix to the Essay on Calcareous Manures, (pp. 103, 104) there is a table of the number of plants, or rectangular spaces, in an acre, at every distance that can be desired. This will be found far more convenient for reference to show the number of mulberry plants to an acre, than for the other purposes for which the table was originally designed.

According to this table, an acre of land planted with cuttings at the distance of 3 feet by 1, would take 14520 plants. This allows abundant space for the first year's growth. At 3 feet by 11½ inches, there would be 15125 plants; and therefore, for round numbers, 15,000 may be taken as the number of cuttings proper for an acre, and which, if not growing unusually large, would not be too thick, even if all were to live. Upon this ground, the cost and returns (and *conjectured* profits) will be estimated.

COST.

15,000 single-bud cuttings, bought Nov. 1838, at 2½ cts. each, make the cost for an acre,	$375
Interest on do.	22
Keeping cuttings through winter and cultivation in 1839,	25
Rent of land,	18
	440

PROFIT.

Suppose of 15,000 cuttings, 6000 to fail, and only 9000 to grow, and these to average only 30 good buds each, and these buds to sell in Nov. 1838, at but half a cent each, then the product will be,

9000 plants, × 30—270,000 buds × ½ ct.	$1350
9000 roots, at 3 cents each,	270
Gross product,	1620
Deduct cost,	440
Leaves, upon these data, clear profit,	1180

This profit, or even half as much, ought surely to satisfy the most eager; and as every expense is charged full high, and the failures allowed are far too many, for an average season, (and even if such unusual loss should occur, the vacant spaces might be filled by summer layers,) there is nothing wanting to almost ensure the full profit, except this *one datum, that buds next fall must be worth a half a cent each*. Of this chance, we leave each one to conjecture for himself.

If, as most persons now believe, the price should be much higher than the above stated, there would be more than a proportional increase of nett profit, as no more expense will have to be paid; and if the present enormous prices of the cuttings and roots should be maintained in the next crop, (say 2½ cents the bud, or 15 cents the foot,) then the gross product of the acre would rise to the almost incredible amount of $8100

And, deducting expenses,	440
The nett profit would be	$7660

Enormous as is this statement of profit, it is believed that it has been equalled this season in sundry cases. The most remarkable example, in which it is believed that these profits have been fully equalled, is in the large nursery near Richmond, cultivated by Wm. Kenrick, a nurseryman of Newton, near Boston; though under all the disadvantages of cultivating by agents, and on rented land so many hundred miles from his residence.

THE CORN PLANTER.

Mr. S. Woods of Worcester, exhibited at the Worcester Cattle Show, an ingenious, and we are inclined to think a very useful invention.—Mr. Woods has the right principle; he can plant any number of kernels of corn any distance apart. It is drawn by horse power, and a man instead of fatiguing himself by the *old fashioned method of planting*, may sit upon his seat and enjoy his *otium cum dignitate*, with none to molest or make him afraid, with no care, little labor, and sure to have his work done with mathematical precision, by his correct and untiring locomotive. The price of the large machine is $30. It can be made, however, on a smaller scale. The large machine is admirably adapted to the western prairie lands. A farmer there, with this machine, may take seed enough with him to plant a dozen acres, and after guaging it to suit himself, may mount on his box, and drive round at his leisure, sure to accomplish much more work in this way, and in a better manner, than if he delved and tugged like a galley slave. By a judicious management, Mr. Woods will realize a handsome remuneration for his invention. We would suggest to him the advantage of depositing his machines in some good place in the city, when the representatives and others doing business at the general Court next winter, can have a chance to examine it.—*Yankee Farmer.*

West's New & Cheap Thrashing Machine, *Patented July* 26th, 1838. We know nothing of this Machine excepting what we learn from an advertisement and accompanying certificates; but if it is equal to what it is "cracked up" to be, it surely is a machine very much needed by a great many farmers.

From the advertisement it appears that it is a man power machine and may be advantageously worked by one man, who propels and feeds the machine, or by two who keep it constantly going by changing, one propelling the machine and the other raking off the straw and putting up the bundles. It thrashes mowed or reaped grain as clean as horse power.—It is not dangerous nor liable to injury. If the wheat be good, one man will thrash from ten to fifteen bushels, and two men from twenty to 30 bush. per day. Those who wish to purchase should apply to Ammi West, Greene, Maine.

One certificate shows that fifteen men have used this machine at their barns, that they are confident that it will come into general use, and that thirty bushels per day can be thrashed by two men with as much ease as ten bushels with flails In another certificate, two men stated that they had worked this machine eight days, and that they had worked with as much or more ease than with flails, and did three times as much.

It is not our intention to recommend this machine, but merely introduce it to the notice of our readers. Will the proprietor please inform us what is the price of his machine, how durble it is, how much room it requires, how much it weighs, &c. and if he will send one to the Yankee Farmer Office, Boston, and another to Portland, they will be put into good hands and have a fair trial.

What say you friend West, will you bring on your better "notions?"—*ib.*

FOR SALE,

A valuable FARM of prime soil, on the Western Run in Baltimore county, about two miles north west of the 14th mile stone of the Baltimore and York turnpike road, and at the same distance from the depot of the Baltimore and Susquehanna rail road, at Cockey's tavern, in a rich, highly cultivated and healthy tract of country.

This farm contains from 260 to 270 acres, having a full proportion in wood, much of which is building timber, peculiarly valuable in that neighborhood; is in the best state of cultivation; a considerable part in productive timothy meadow, and the residue of the arable land, not in grain, is well set in clover, the whole under good fencing, laid off into convenient fields, each of which is well watered. The farm has a large quarry of excellent building stone. There are on the premises an apple orchard of select fruit trees, which seldom fail to bear abundantly; a valuable mill seat on the Western Run, with a race already dug. There is no location in the country more favorable for a grist mill, having the advantage of a rich and thickly settled neighborhood, and a good public road leading thence to the turnpike road. Buildings substantial and convenient, being a STONE DWELLING, and kitchen of two stories; a large stone Switzer barn, with cedar roof and extensive stabling below; large hay house and stable for cattle; stone milk house near the dwelling, with a spring of fine never failing water, with other out-houses. On the country road near the mill-seat a good house and shop for a mechanic, under rent to a good tenant. It is well known the lands on the Western Run are in every respect equal, if not superior to any in the county. Adjoining or near are the lands of Col N. Bosley, Daniel Bosley, Thos. Matthews and others. The water power, with about 20 acres of land, is so situated that they may be detached and sold separately, without injury to the rest of the farm for agricultural purposes. Terms of sale will be liberal. Apply to

NATHANIEL CHILDS,
on the premises, or to
WILLIAM J. WARD,
oc 23 tf Fayette, near Calvert st. Baltimore.

SILK AGENCY,

Corner of E. and 7th streets, Washington City, D. C.

The subscriber having commenced an Agency for the purchase and sale of SILK MULBERRY TREES, and all articles connected with the growing of Silk, offers for sale the following varieties of Mulberry Trees at Baltimore prices, viz. Multicaulis, Alpine, Broussa, White Italian and Canton; also Mammoth White Silk Worm's Eggs, warranted to be of superior quality. All the recent publications on silk growing for sale, and subscriptions received for the various periodicals devoted to that subject. no 20 J. F. CALLAN.

FOR SALE,

COLUMBUS, a well bred race horse—his pedigree, which is perfect, will be given. Enquire of
no 6 3t EDW. P. ROBERTS, Ed. Farm. & Gard.

GENUINE BARNITZ PIGS.

The subscriber has for sale the following pigs, which are warranted genuine:

2 pair 4 months old, and
1 pair 10 weeks old.

The Barnitz hogs are distinguished for their early maturity and size, attaining upon clover pasture from 250 to 300 lbs. when 12 and 15 months old. The price of the largest size is $15 a pair; that of the smallest 10 a pair.

Applications by letter to be POST PAID.

EDWARD P. ROBERTS,
oc 30 Baltimore, Md.

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	——
CATTLE, on the hoof,	100lbs	8 00	9 00
CORN, yellow	bushel	85	——
White	"	84	85
COTTON, Virginia,	pound	9	11
North Carolina,	"	9¼	11
Upland,	"	9¼	11
Louisiana —— Alabama	"	11¼	12
FEATHERS,	pound.	45	50
FLAXSEED,	bushel.	1 12	——
FLOUR & MEAL—Bestwh. wh't fam.	barrel.	10 00	10 50
Do. do. baker's	"	——	——
SuperHow. st. from stores	"	7 75	7 87
" " wagon price,	"	7 75	7 75
City Mills, super	"	——	——
" extra	"	8 00	——
Susquehanna,	"	——	——
Rye,	"	5 50	——
Kiln-dried Meal, in hhds.	hhd.	19 00	——
do. in bbls.	bbl.	4 00	——
GRASS SEEDS, wholes. red Clover,	bushel.	——	——
Kentucky blue	"	——	——
Timothy (herds of the north)	"	——	——
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	——	3 00
Herds, or red top,	"	90	1 00
HAY, in bulk,	ton.	12 00	16 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	——
HOGS, on the hoof,	100lb.	8 50	9 00
Slaughtered,		——	——
HOPS—first sort,	pound.	9	——
second,	"	7	——
refuse,	"	5	——
LIME,	bushel.	32	33
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	40	42
PEAS, red eye,	bushel.	——	1 12
Black eye,	"	1 00	1 12
Lady,	"	——	——
PLASTER PARIS, in the stone, cargo,	ton.	4 50	——
Ground,	barrel.	1 50	——
PALMA CHRISTA BEAN,	bushel.	——	——
RAGS,	pound.	3	4
RYE,	bushel.	90	93
Susquehannah,	"	——	none
TOBACCO, crop, common,	100lbs	4 00	4 50
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	6 00	——
" ground leaf,	"	5 00	8 00
Virginia,	"	4 50	6 00
Rappahannock,	"	——	——
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 80	——
Red, best	"	1 65	1 75
Maryland	"	1 70	1 72
WHISKEY, 1st pf. in bbls.	gallon.	44	45
" in hhds.	"	43	——
" wagon price,	"	bbls	——
WAGON FREIGHTS, to Pittsburgh,	100lbs	2 50	——
To Wheeling,	"	2 75	——
		washed	unwash
WOOL, Prime & Saxon Fleeces,	pound.	50 to 55	——
Full Merino,	"	45 50	
Three fourths Merino,	"	40 45	
One half do.	"	35 40	
Common & one fourth Merl.	"	35 40	
Pulled,	"	30 33	

POTATOES, 60 to 70 cts. a bushel.

A HALF DURHAM COW FOR SALE.

The subscriber has for sale a beautiful *fashionable* roan half Durham Cow. She is fresh in milk and only 4 years old. Her price is $75. Applications, post-paid, to be made to ED. F. ROBERTS.

Who has also for sale several full bred Devons, males and females. oc 2 4t

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	——	——
BACON, hams, new, Balt. cured	pound.	15	——
Shoulders, do	"	13	——
Middlings, do	"	13	——
Assorted, country,	"	13	——
BUTTER, printed, in lbs. & half lbs.	"	31	37½
Roll,	"	25	31½
CIDER,	barrel.	1 75	2 00
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 75	——
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12½	——
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	"	9 50	——
Herrings, salted, No. 1,	"	5 75	——
Mackerel, No. 1, —— No. 2	"	12 50	——
No. 3,	"	——	7 25
Cod, salted,	cwt.	3 25	3 37
LARD,	pound.	14	15

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	par
Other Branches,	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg,	do
Banks in Baltimore,	par	Petersburg,	do
Hagerstown,	o	Norfolk,	do
Frederick,	do	Winchester,	do
Westminster,	do	Lynchburg,	do
Farmers' Bank of Mary'd,	do	Danville,	do
Do. payable at Easton,	do	Bank of Valley, Winch.	par
Salisbury, 1 per ct. dis.		Branch at Romney,	par
Cumberland,	par	Do. Charlestown,	par
Millington,	do	Do. Leesburg,	par
DISTRICT.		Wheeling Banks,	2½
Washington, Georgetown, Alexandria, Banks, 1p.c.		Ohio Banks, generally	3
PENNSYLVANIA.		New Jersey Banks gen.	3
Philadelphia,	par	New York City,	par
Chambersburg,	¼	New York State,	do ¼
Gettysburg	do	Massachusetts,	1¼a2
Pittsburg,	2¼	Connecticut,	1¼a2
York,	¼	New Hampshire,	1¼a2
Other Pennsylvania Bks.	2	Maine,	1¼a2
Delaware [under $5]	4	Rhode Island,	1¼a2
Do. [over 5]	1¼	North Carolina,	3a3½
Michigan Banks,	10	South Carolina,	4a5
Canadian do.	10	Georgia,	5a5½
		New Orleans,	7a8

SPLENDID BLOODED STOCK FOR SALE.

The proprietor of Covington farm will dispose of the following fine bulls on reasonable terms, viz.

One bull two and a half years old.

One do. six months old.

of the *improved Durham short horn breed*; the dam of the first was got by the celebrated bull Bolivar; for size, form and beauty they are not surpassed by any animal in the state.

Three *Devon Bulls*, one of which is seven years old next spring, and the largest Devon in the State. The Devons are from the stock of the late Wm. Patterson, and of undoubted purity.

Two half Devon bulls.

Two bulls half improved Durham short horn, and half Devon.

One splendid bull, a cross of the Bakewell, Alderney and Devon.

One bull, half Alderney and half Holstein.

These fine animals may be seen at Covington farm, near Peterville, Frederick county, Md. on application to James L. Hawkins, Baltimore, or to

se 11 f FREDERICK EBERT, Manager.

SPRING CLOVER SEED,

Just received and for sale, by

R. SINCLAIR, Jr. & CO.

oct. 16 3

CHINESE MORUS MULTICAULIS.

At the Linnæan Gardens, Flushing, New York.

50,000 splendid TREES of the genuine Morus Multicaulis are now remaining for sale at moderate prices according to their size; and also Cuttings of the same. None of the Humbug kind are sold at this establishment. Also 20,000 trees of the splendid Morus Expansa, which has very large leaves, greatly loved by the worm, it is very hardy, and yields silk of the first excellence. A great supply of the Moretta or Alpine Mulberry, the Canton, Chinese, Brousa, Asiatic, Pyramidalis, Rose of Lombardy, Morus Alata, and other varieties.

Also Fruit and Ornamental TREES, Plants and Seeds of every kind, and an immense stock of Bulbous Flower Roots, just arrived from Holland.

Silk Worms Eggs of every kind at the lowest prices, and White Italian, Canton, and Moretti or Alpine Mulberry Seeds in any quantity. The Morus Multicaulis Trees raised here have one-third more joints and buds than southern trees, and of course are worth 50 per cent more for propagation; and the wood becomes as mature and perfect on the high exposed position our Nurseries occupy as at any place in the Union. Also, Fruit and Ornamental Trees, Bulbous Roots, Green House Plants, and Seeds of all kinds, for sale in large or small parcels.

Priced catalogues will be sent to every applicant, and orders per mail will be executed with as much precision and dispatch as if the purchasers were present, and will be packed so as to be sent to the remotest region with safety.

no 20 2m WM. PRINCE & SONS.

CHINESE MULBERRY TREES.

American Silk Agency, No. 5, Bank street, Philadelphia.

The subscriber having opened a permanent Agency for the purchase and sale of all articles connected with the culture and manufacture of Silk in the United States, offers for sale all the different varieties of MULBERRY TREES, suitable for raising the SILK WORM; viz. Morus Multicaulis Alpines, Brussa Multicaulis Seedlings, Morus Expansa, Multicaulis Cutlings, Improved Italian Trees, &c. Also, Cutlings from *Norton's Virginia Seedlings*, and Cunningham's Prince Edward GRAPE Vine. These vines produce an abundant crop of fruit, warranted not to rot or mildew and are fine for the table, and capable of yielding the finest wines.

S. C. CLEVELAND, Agent.

☞ Those who may wish to enter into this profitable branch of national industry, will do well to call on the Agency, and see that they are well instructed in the value of the trees they purchase.

N. B. The particular attention of those engaged in the culture and manufacture of American Silk, whether of trees, Eggs, Cocoons, reeled or manufactured, is called to this agency. The Agent will give every attention to Sales, and prompt remittance of proceeds of any article sent to him. Those who may wish to purchase and enter in this valuable branch of home industry, can obtain from the agent every information, and also such Articles as they may want without fear of deception.

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AGRICULTURAL IMPLEMENTS AND SEED STORE.

THE SUBSCRIBER informs the public that he keeps constantly on hand at his old establishment in Pratt-street, near Hanover, a large assortment of PLOUGHS and Agricultural IMPLEMENTS generally, which are too numerous to name in an advertisement, but invites such of the public who are in want of any articles in his line to call, assuring them that his work shall be as well made, as good materials, and on as reasonable terms as any in the State. His patent Cylindrical Straw Cutters made on his late improved plan are kept at all times on hand, of various sizes and prices, with wood and iron frames, and he challenges its equal in any part of the state. Having an iron foundry attached to my establishment, orders for Ploughs and Machine castings can be furnished at short notice and on reasonable terms.

In store—Herds and Orchard GRASS SEEDS, prime quality; also, Landreth's superior GARDEN SEEDS. He is also agent for Mr. Samuel Reed's Nursery, near Salem, New Jersey, whose *fruit trees* he can recommend to the public with confidence. Those wishing Trees from that Nursery this fall should hand in their orders immediately. J. S. EASTMAN.